Practice for Chapter three

Fall 2017

(1) Additional practice for comparative advantage.

The following table shows the output per hour of work for light bulbs and flash drives in Mexico and in Canada.

Output Per Hour of Work

	Light Bulbs	Flash Drives
Mexico	20	5
Canada	8	32

Fill in the following table with the opportunity costs of producing light bulbs and flash drives for Mexico and Canada. And find which country has comparative advantage in the production of flash drives.

	Light Bulbs	Flash Drives
Mexico	0.25 F	4L
Canada	4F	0.25L

Answer: Canada has the comparative advantage in the production of flash drives.

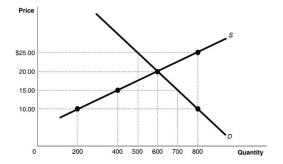
(2) Chapter three, part one (Wednesday)

- 1) If, in response to an increase in the price of coffee, the quantity of coffee demanded decreases, economists would describe this as
- A) a decrease in demand. B) a decrease in quantity demanded.
- C) a change in consumer income. D) an increase in consumers' taste for coffee.
- 2) The phrase "demand has increased" means that
- A) a demand curve has shifted to the left.
- B) there has been an upward movement along a demand curve.
- C) there has been a downward movement along a demand curve.
- D) a demand curve has shifted to the right.
- 3) If an increase in income leads to a decrease in the demand for salami, then salami is
- A) an inferior good.
- B) a neutral good.

- C) a necessity.
- D) a normal good.
- 4) Suppose that when the price of oranges decreases, Sarita decreases her purchases of peaches. To
- A) oranges and peaches are complements. B) oranges and peaches are inferior goods.
- C) oranges and peaches are normal goods. D) oranges and peaches are substitutes.
- 5) Several studies have shown promising links between green tea consumption and cancer prevention. How does this affect the market for green tea?
- A) The quantity of green tea demanded increases because of a change in tastes in favor of green tea.
- B) The green tea demand curve shifts to the right because of a change in tastes in favor of green tea.

- C) The green tea demand curve shifts to the left because this new information will increase the price of green tea.
- D) The quantity of green tea demanded decreases because this new information will increase the price of green tea.
- 6) If in the market for bananas the supply curve has shifted to the right, then
- A) the supply of bananas increased.
- B) the quantity of bananas supplied has increased.
- C) the supply of bananas has decreases.
- D) the quantity of bananas supplied has decreased.
- 7) _____ means the supply curve has shifted to the right, while ____ refers to a movement along a given supply curve in response to an increase in price.
- A) An increase in supply; a decrease in supply
- B) A decrease in supply; an increase in supply
- C) An increase in supply; an increase in quantity supplied
- D) A decrease in supply; a decrease in quantity supplied
- 8) Which of the following would cause an increase in the supply of cheese?
- A) a decrease in the price of wine (assuming that cheese and wine are complements)
- B) an increase in the price of cheese
- C) an increase the price of a product that producers sell instead of cheese
- D) an increase in the number of firms that produce cheese
- 9) Farmers can plant either corn or soybeans in their fields. Which of the following would cause the supply of soybeans to increase?
- A) an increase in the price of soybeans
- B) a decrease in the price of corn
- C) an increase in the demand for corn
- D) an increase in the price of soybean seeds
- 10) At a product's equilibrium price
- A) anyone who needs the product will be able to buy the product, regardless of ability to pay.
- B) the federal government will provide the product to anyone who cannot afford it.
- C) not all sellers who are willing to accept the price will find buyers for their products.
- D) any buyer who is willing and able to pay the price will find a seller for the product.





- 11) Refer to Figure 3-1. If the price is \$25,
- A) there is a surplus of 300 units.
- B) there is a shortage of 300 units.
- C) there is a surplus of 200 units.
- D) there is a shortage of 200 units.
- 12) Use the supply curves to illustrate what effects will each of the following have on the *supply* of Toyota car in the market?
 - a. A technological improvement in the method of producing Toyota car.
 - b. An increase in the price of steel, a resource required in Toyota car production.

Answer: a, the supply curve of Toyoto car shifts to the right.

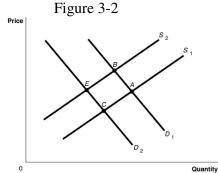
B, the supply curve of Toyoto car shifts to the left.

(3) Chapter three, part two (Friday)

- 1) Use supply and demand curves to illustrate how each of the following events would affect the price of butter and the quantity of butter bought and sold:
 - a. An increase in the price of milk. (assume that milk is used as input for butter production)
 - b. A decrease in average income levels.

Answer: a, the supply curves of butter shifts to the left.

B, the demand curves of butter shifts to the left.



- 2) Refer to Figure 3-2. The graph in this figure illustrates an initial competitive equilibrium in the market for motorcycles at the intersection of D1 and S1 (point A). If the price of motorcycle engines increases, and the wages of motorcycle workers increase, how will the equilibrium point change?
- A) The equilibrium point will move from A to E.
- B) The equilibrium point will move from A to B.
- C) The equilibrium point will move from A to C.
- D) The equilibrium will first move from A to B, then return to A.

- 3) Refer to Figure 3-2. The graph in this figure illustrates an initial competitive equilibrium in the market for motorcycles at the intersection of D2 and S2 (point E). If the technology to produce motorcycles improves and the number of buyers increases, how will the equilibrium point change?
- A) The equilibrium point will move from E to A.
- B) The equilibrium point will move from E to B.
- C) The equilibrium point will move from E to C.
- D) The equilibrium point will remain at E.
- 4) Refer to Figure 3-2. The graph in this figure illustrates an initial competitive equilibrium in the market for motorcycles at the intersection of D1 and S1 (point A). If there is an increase in the wages of motorcycle workers and an increase in the price of motorcycle insurance, a complement to motorcycles, the equilibrium could move to which point?
- A) A
- B) B
- C) C
- D) E
- 5) Refer to Figure 3-2. The graph in this figure illustrates an initial competitive equilibrium in the market for motorcycles at the intersection of D1 and S2 (point B). If there is an increase in number of companies producing motorcycles and a decrease in income (assume motorcycles are a normal good), the equilibrium could move to which point?
- A) A
- B)B
- C) C
- D) E
- 6) A market for a commodity consists of three individuals A, B and C whose demand functions for the commodity are given below.

$$Q_A = 40 - 2P$$

 $Q_B = 25.5 - 0.75P$
 $Q_C = 36.5 - 1.25P$

Find out the market demand functions for the commodity. If the market supply function is given by $Q^S = 22 + P$, determine the equilibrium price and quantity.

Answer:
$$Q^D = Q_A + Q_B + Q_c = 102-4P$$

Set $Q^D = Q^S$
 $102-4P = 22+P$
We got $P^* = 16$
Then $Q^* = 38$

7) Suppose the demand and supply for book is described by the following equations:

$$Q^{D} = 600 - 100P$$

 $Q^{S} = -150 + 150P$

Graph supply and demand and determine equilibrium price and quantity. Confirm your answer by solving the equations mathematically.

Answer: $P^*=3$, $Q^*=300$